CLAIM AMENDMENTS

Claims 1-244 (canceled)

245. (currently amended) A nucleic acid construct ~~which when present in a cell directs synthesis of a nucleic acid product, said construct comprising a sequence hybridized to a complementary polynucleotide sequence of a linear polynucleotide tail wherein said polynucleotide tail~~ comprising at least three nucleic acid strands:

(a) a first nucleic acid strand, wherein said first nucleic acid strand is a circular strand;

(b) a second nucleic acid strand, wherein said second nucleic acid strand is fully complementary to said first nucleic acid strand;

(3) a third nucleic acid strand, wherein a portion of the third nucleic acid strand is complementary to said first nucleic acid strand and the remaining portion is not complementary to said first nucleic acid strain and not complementary to said second nucleic acid strand,

wherein when said first nucleic acid strand is hybridized to said second nucleic acid strand to form a double stranded portion comprising said second nucleic acid strand, wherein said double-stranded portion forms a template for synthesis of a nucleic acid product when present in a cell;

wherein when said first nucleic acid strand is hybridized to a portion of said third nuclelc acid strand, said second nucleic acid strand complementary to said first nucleic acid strand and said portion of said third nucleic acid strand complementary to said first nucleic acid strand form a gapped circle, and said portion of said third nucleic acid strand not complementary to said first nucleic acid strand and not complementary to said second nucleic acid strand forms a linear tail, and (i) said linear tail is covalently attached to an antibody or (ii) said linear tail is hybridized to a fourth nucleic acid strain, wherein said fourth nucleic acid strain is covalently attached to an antibody.

246. (original) The construct of claim 245 wherein said antibody comprises a polyclonal or monoclonal antibody.

247 (currently amended) A composition comprising:

(a) a non-natural entity which comprises :

(i) ~~at least one domain to a specific nucleic acid wherein said domain to said specific nucleic acid component is selected from the group consisting of~~a first domain, wherein said first domain is an entity that binds noncovalently to a specific nucleic acid component and **comprises** a linear nucleic acid **strand** complementary to a sequence of **a nucleic acid strand of** said specific nucleic acid component ~~and a protein that binds to a ligand of a modified nucleotide in said specific nucleic acid component~~ and

(ii) ~~at least one domain to a cell of interest, wherein said domain to said cell of interest~~a a second domain, wherein said second domain is an entity that binds noncovalently to a cell of interest, wherein said second domain is ~~selected from the group consisting of a hormone specific to a receptor on said cell of interest, a lectin specific for a sugar on the surface of said cell of interest, a virus particle or viral fragment that binds to a receptor on the surface of said cell of interest and~~ an antibody that recognizes a epitope on the surface of said cell of interest,

wherein said second domain is separated from said first domain by extension of a strand of a specific nucleic acid component after introduction of the composition into the cell and

(b) said specific nucleic acid component,

wherein said specific nucleic acid component comprises two separate double stranded regions,

wherein said nucleic acid component (b) is bound to said non-natural entity (a) through ~~said domain to a specific nucleic acid component (i)~~ **hybridization of**

said linear nucleic acid strand **of said first domain** complementary to a sequence of **a nucleic acid strand of** said specific nucleic acid component with said complementary sequences in said nucleic acid strand of said specific nucleic acid component thereby forming a first double-stranded region of said nucleic acid component, wherein said second double-stranded region is formed either by self-complementary sequences of said nucleic acid strand of said nucleic acid component or a third nucleic acid strand is hybridized to said nucleic acid strand of said nucleic acid component,

wherein said specific nucleic acid component is a nucleic acid construct that directs synthesis of a nucleic acid product, and

wherein said nucleic acid component comprises a nucleic acid sequence desired to be delivered to said cell of interest.

248. (previously presented) The composition of claim 247, wherein said non-natural entity further comprises a binder.

Claims 249-250 (canceled)

251. (currently amended) The composition of claim 248, wherein said binder is ~~selected from~~ a polymer~~, a matrix, a support, or a combination of any of the foregoing~~.

Claim 252 (canceled)

253. (original) The composition of claim 247, wherein said cell is prokaryotic or eukaryotic.

Claims 254-260 (canceled)

261. (original) The composition of claim 247, wherein said cell of interest is contained within an organism.

262. (original) The composition of claim 247, further comprising said cell of interest.

263. (previously presented) A method of introducing a nucleic acid component into a cell comprising:

(a) providing the composition of claim 247 and

(b) administering said composition.

264. (original) The method of claim 263, wherein administering is carried out *in vivo*.

265. (original) The method of claim 263, wherein administering is carried out *ex vivo*.

Claims 266-305 (canceled)

306. (previously presented) A kit which comprises:

(a) a non-natural entity which comprises :

(i) at least one domain to a specific nucleic acid wherein said domain to said specific nucleic acid component is a first domain, wherein said first domain is an entity that binds noncovalently to a specific nucleic acid component and comprises a linear nucleic acid strand complementary to a sequence of a nucleic acid strand of said specific nucleic acid component and

(ii) at least one domain to a cell of interest, wherein said domain to said cell of interest a a second domain, wherein said second domain is an entity that binds noncovalently to a cell of interest, wherein said second domain is selected from the group consisting of a hormone specific to a receptor on said cell of interest, a lectin specific for a sugar on the surface of said cell of interest, a virus particle or viral fragment that binds to a receptor on the surface of said cell of interest and an antibody that recognizes a epitope on the surface of said cell of interest,

wherein said second domain is separated from said first domain by extension of a strand of a specific nucleic acid component after introduction of the composition into the cell;

(b) said specific nucleic acid component;

wherein said specific nucleic acid component comprises two separate double stranded regions,

wherein said nucleic acid component (b) is bound to said non-natural entity (a) through hybridization of said linear nucleic acid strand of said first domain complementary to a sequence of a nucleic acid strand of said specific nucleic acid component with said complementary sequences in said nucleic acid strand of said specific nucleic acid component thereby forming a first double-stranded region of said nucleic acid component, wherein said second double-stranded region is formed either by self-complementary sequences of said nucleic acid strand of said nucleic acid component or a third nucleic acid strand is hybridized to said nucleic acid strand of said nucleic acid component,

wherein said specific nucleic acid component is a nucleic acid construct that directs synthesis of a nucleic acid product, and

wherein said nucleic acid component comprises a nucleic acid sequence desired to be delivered to said cell of interest and

~~(a) a non-natural entity which comprises~~

~~(i) at least one domain to a specific nucleic acid component, wherein said domain to said specific nucleic acid component is selected from the group consisting of a linear nucleic acid complementary to a sequence of said specific nucleic acid component and a protein that binds to a ligand of a modified nucleotide in said specific nucleic acid component and~~

~~(ii) at least one domain to a cell of interest, wherein said domain to said cell of interest is selected from the group consisting of a hormone specific to a receptor~~

~~on said cell of interest, a lectin specific for a sugar on the surface of said cell of interest, a virus particle or viral fragment that binds to a receptor on the surface of said cell of interest and an antibody that recognizes an epitope on the surface of said cell of interest;~~

~~(b) said specific nucleic acid component and~~

(c) buffers and instructions~~,~~.

~~wherein said specific nucleic acid component (b) is bound to said non-natural entity (a) through said domain to a specific nucleic acid component (i), wherein said nucleic acid component is a nucleic acid construct that directs synthesis of a nucleic acid product, wherein said nucleic acid component comprises a nucleic acid sequence desired to be delivered to said cell of interest~~.

307. (previously presented) A method of introducing a nucleic acid component into a cell comprising:

(a) providing the composition of claim 245 and

(b) administering said composition.